CULLEN COLLEGE IN THE COMMUNITY?
PARTNERSHIP WITH IEDUCATE TEACHES SUCCESS

Posted on February 24, 2017
By:
Laurie Fickman
When Jameel Jordan became a petroleum engineering student at the Cullen College he never dreamed he’d also become a mentor to third graders.

?It never crossed my mind,? said Jordan.

But the opportunity found him when he learned of iEducate, a group that pays you to share your knowledge of STEM courses (science, technology, engineering and mathematics) with students in Houston?s underserved communities.

It seemed a good fit. Turns out it was perfect.

As a member of the UH Chapter of the National Society of Black Engineers, Jordan takes seriously the group?s mission to breed culturally responsible black engineers by impacting the community. That?s why you?ll find him, two days a week, just a stone?s throw from the University of Houston at Blackshear Elementary in Houston?s Third Ward where he tutors third graders.

But the beauty of the program doesn?t just come from the course work the tutors teach ? it also shows up in the life lessons they impart.

?I grew up in this community, from this neighborhood, and that?s such a big part of this. These kids see someone like me, who looks like them, who they can relate to, who is getting an education at UH and people in their lives might not be doing that,? said Jordan.

Scan the demographics of Blackshear Elementary and you?ll see why the UH/iEducate partnership is such a perfect fit. Blackshear is a Title I campus where 100 percent of the 536 students qualify for the free or reduced lunch program. Title I schools, with high numbers of poor children, receive financial assistance through state educational agencies to help ensure that all children meet challenging state academic content and student academic achievement standards.

?These students just don?t hear the word ?engineering? at home. They don?t have the certain type of mentors that students at UH can provide,? said Jordan.

The kind of mentors that the new principal of Blackshear, Alicia Lewis, can?t praise enough when she talks about the impact on her students, who she calls ?scholars.?

?This program and the UH students provide the mentorship, the relationship and the consistency that some of our scholars don?t have in their home life and we?re giving them that,? said Lewis. ?We?re giving them someone who will help them no matter where they are academically or what level they are on.?

It?s quite the gift. Lewis credits a new teacher along with iEducate and the tutors with a rise in test scores.

?We?ve seen a great difference with our science proficiency,? Lewis said. When she arrived, only 27 percent of students passed the standardized science exams. Last year 46 percent passed.

Lewis, herself, plays a large role in the school?s increasing success. She is part cheerleader, part force of nature, determined to push her school forward. After three principals in two years, the school scored Lewis, who committed to a five-year term and already says, excitedly, she wants more. As a former math specialist, she has goals for STEM courses at Blackshear.

?We?re ashamed to say ?I can?t read,? but we?re not ashamed to say, ?I have a problem with math or science,? so we have to teach our scholars that math is as important as reading. iEducate and UH students are making that happen.
Truth in numbers

Blackshear Elementary isn’t the only school to boast an increase in proficiency because of Cullen College tutors connected to the iEducate program.

In 2013 Roopa Gir, a former physicist at Schlumberger, formed iEducate after tutoring with an alumni group. She found that her peer tutors weren’t connecting with students as she hoped and decided to try college students in the classroom to see if they could better relate.

They entered their first school, Crockett Elementary, where 67 percent of 5th graders had passed the STAAR math exam (the state’s standardized assessment). Quickly the scores began to rise. Last summer, all students - 100 percent - passed the test.

You don’t have to be a math whiz to understand those numbers.

?Most of these kids have no idea what engineering is or what they can do with math or science,? said Gir’s son, Arun Gir, who now runs iEducate. Passionate about lowering the student-teacher ratio significantly with the addition of tutors, Gir is equally excited about the collaboration with UH. Two-thirds of the 120 tutors come from UH and half of those are from the Cullen College.

?We don’t ask just anyone to be a tutor,? said Gir. ?Our average tutor has a 3.5 GPA. We really want to offer this opportunity to students who are excelling in their STEM field.?

The screening process for becoming an iEducate tutor is rigorous, but the rewards are greater.

Jordan talks about the amazement of building a relationship with a troubled student who is craving a male presence in his life and is beginning to turn a corner emotionally and academically. Plus, the experience has exposed Jordan to professionals who offered him an externship at Schlumberger. That’s one of those cases you might call a win-win.

Back at Blackshear

Bionka Edmundson is a child prodigy. She is a first-generation college student, senior in petroleum engineering at the Cullen College and an iEducate tutor. She graduated high school at 16 and could have done it younger, but her mom said she was too young. While her mother knew continuing education was going to be vital for Edmundson, she wasn’t sure how best to steer her. So Edmundson attended a couple of different schools before settling down at UH.

?I didn’t have any real academic guidance, and I was just stumbling along until I decided to come to UH,? said Edmundson.

It’s that path that helps her guide others.

?I love iEducate. They’re taking kids and trying to give them a shot and, honestly, that’s why I work so hard to give little kids who look like me, with the same story I had - no dad, single mom, food stamps - a better chance,? said Edmundson.

She’s now providing the kind of guidance she craved. While the youngsters study in class, she also studies on her computer for upcoming engineering classes. Surprisingly, the kids are more interested in what she has on her screen.

?They see my derivatives and formulas on my screen and the fact I’m doing something so foreign to them, they are so interested,? said Edmundson. ?The fact that I’m just here and they actually know engineering exists, it’s like the Native Americans who never saw the boat coming because they didn’t know what a boat was. Now
these kids know what's out there,' she says in a familiar refrain about the power of exposing children to the
STEM fields.

For Edmundson, Schlumberger Midland is out there, where she's already accepted a position as a field
completion engineer. She'll move there, but not until iEducate's summer enrichment camp is completed in
June.

© University of Houston Cullen College of Engineering